

### Abstract of the Disclosure:

In a node having first, second, and third layers, a packet (or a cell) is mapped in the first layer. The first layer judges whether the packet (or the cell) is to be dropped at the node or to be hopped to a next node. The first layer transmits the packet to the third layer through the second layer when the first layer judges that the packet is to be dropped at the node. The first layer transmits, when the first layer judges that the packet is to be hopped to the next node, the packet to the next node by making the packet cut through the first layer.